

A different perspective on UIs

(user interfaces) :

purpose, checklists, reviews

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Welcome.

You have seen the title
and contents pages,
so you have a fair idea of
what this document is about.

Should you read it?

No, if you want to be entertained,
if you resent analytical thinking,
or if you dislike diagrams.

Yes, if you are curious about the
"different perspective", or if you want to
extend your knowledge and skill set
(professional or not).

Yes, from page 28 onwards,
if you just need an easy way
to evaluate a UI.

If you're undecided, or
only have time for two pages:
take a look at p. 13 and 44.

Progress

Intro done

UX and UI purpose up next

Necessary ingredients for a good UI

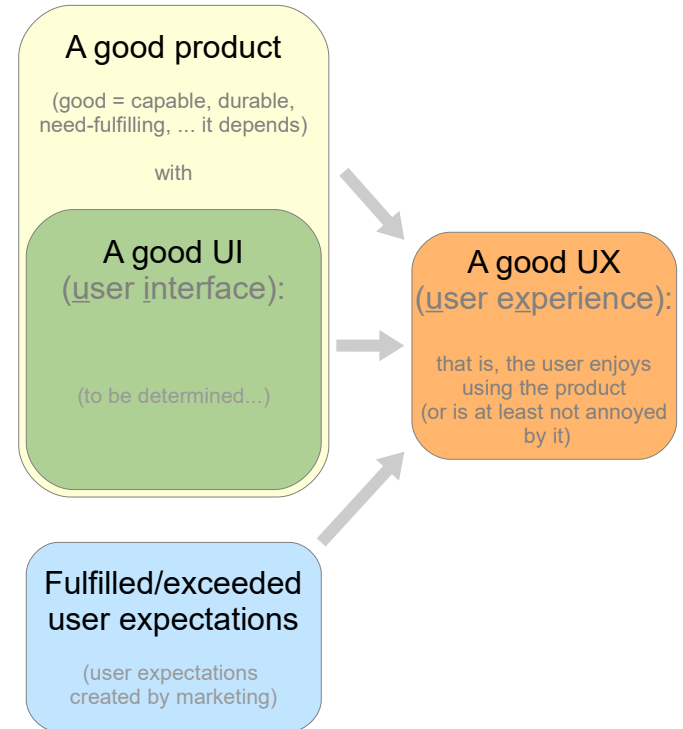
UI checklists and evaluations

Closing remarks

Q: How do UI and UX (user experience) relate?

A: Creating a good UX requires 3 steps:

- a) make a good product
- b) make a good UI for the product
- c) make sure the user knows what the product can or cannot do
-- before buying or using it.
Requires honest marketing.
Disappointed user = poor UX



UI/UX goal map

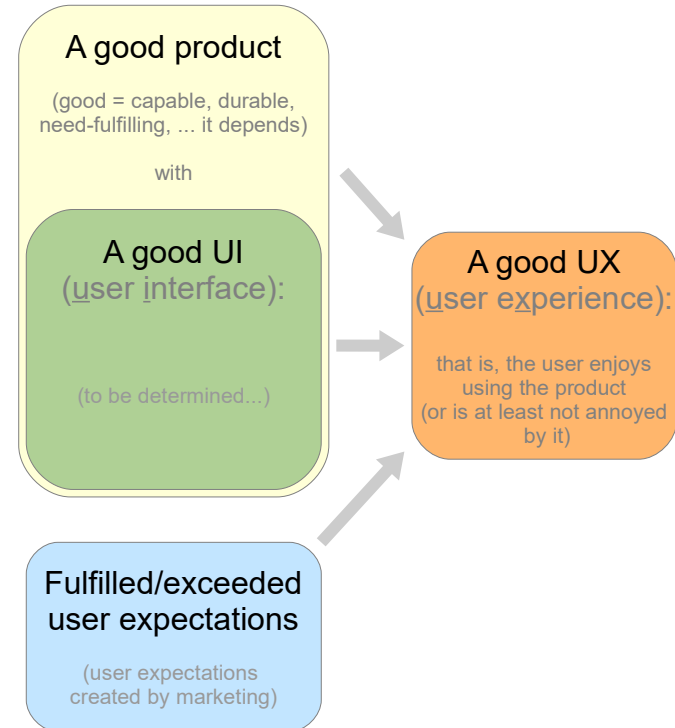
→ : ... is necessary to achieve ...

The diagram on the right is a goal map.

The boxes represent goals, while the arrows indicate what is necessary to achieve a goal.

And that's how UI and UX relate:
a good UI is necessary for a good UX.

But ... ?



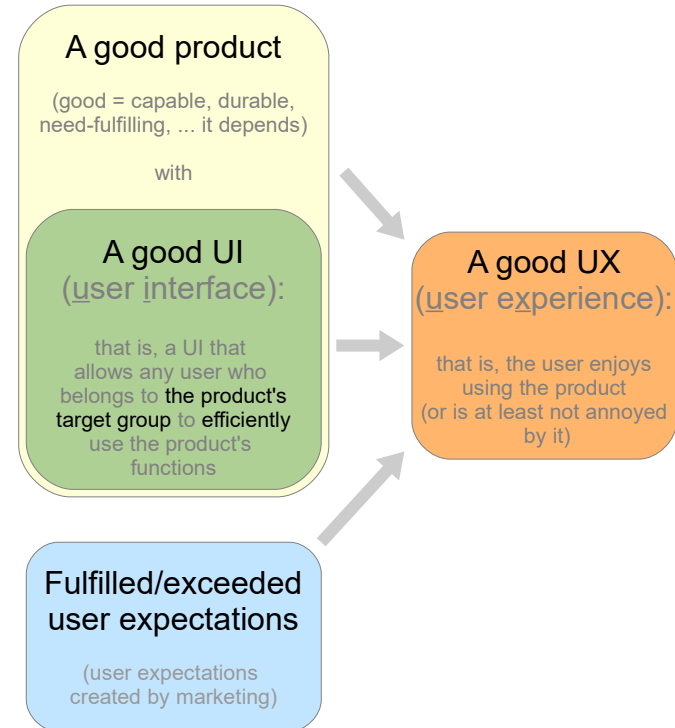
... Q: What is a good UI?

A: If it serves its purpose well, it's a good one. Otherwise not.

Q: What is the purpose of a UI?

A: A UI should allow any user who belongs to the product's target group to efficiently use the product's functions.

(Product = software / device / service)



Q: What is the purpose of a UI?

A: A UI should allow any user who belongs to the product's target group to efficiently use the product's functions.

Let me add 3 notes to this answer:

1) **The target group(s) must be specified.**

Because it's impossible to design a good UI if you don't know who you are designing it for.

Q: What is the purpose of a UI?

A: A UI should allow any user who belongs to the product's target group to efficiently use the product's functions.

2) No one becomes an experienced user without having been an inexperienced one before.

Therefore, any UI not suitable for inexperienced users causes a need for training (courses?) -- or shuts out everyone except determined, frustration-resistant users.

Q: What is the purpose of a UI?

A: A UI should allow any user who belongs to the product's target group to efficiently use the product's functions.

3) Of course we want the UI to look good, too. But that is not really its purpose.

Moreover, what a user finds "good looking" depends very much on personal preferences, cultural factors -- and ever-changing fashion.

Progress

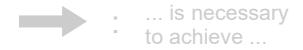
Intro done

UX and UI purpose done

Necessary ingredients for a good UI up next

UI checklists and evaluations

Closing remarks

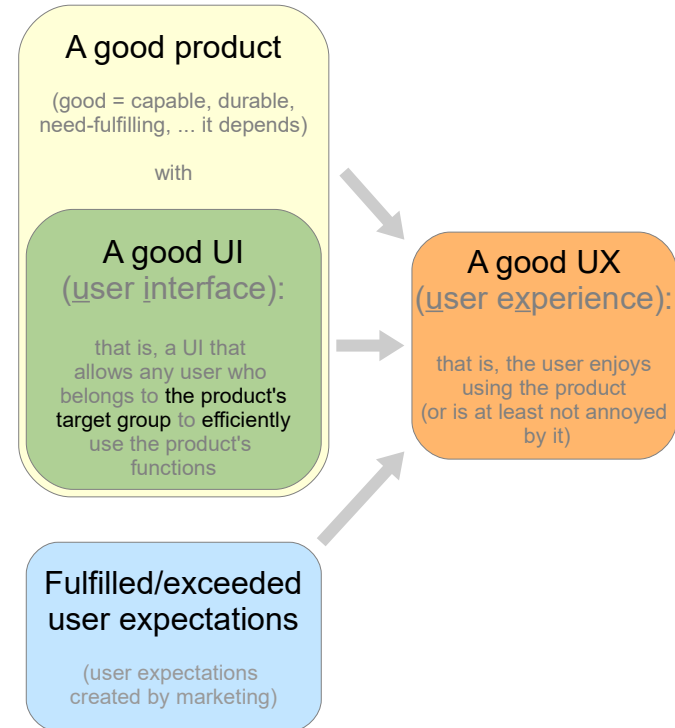


Last question (for a while):

What is necessary to achieve the "good UI" goal?

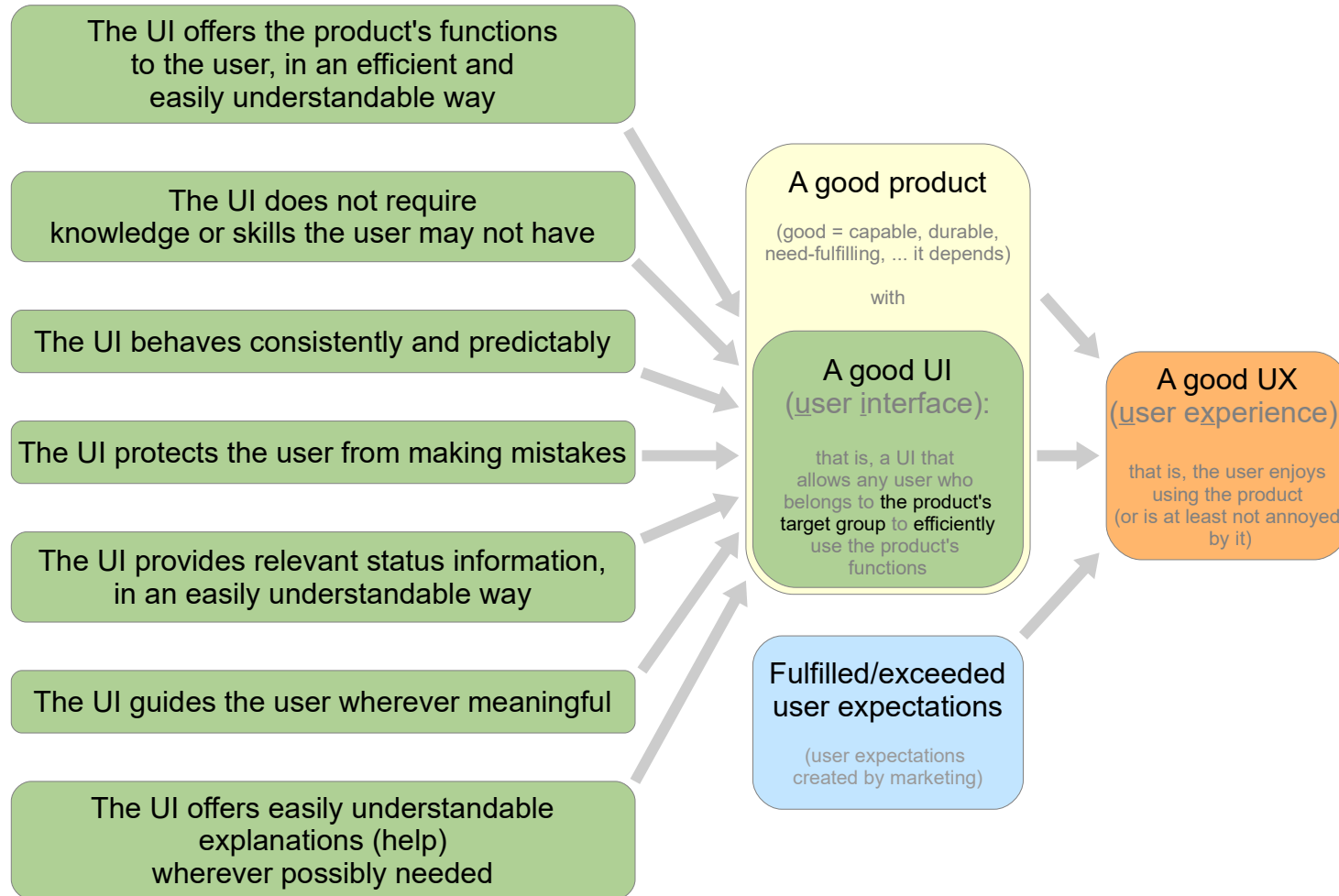
A: We need at least 7 ingredients.

Here they come, phrased as goal statements: ...



UI/UX goal map

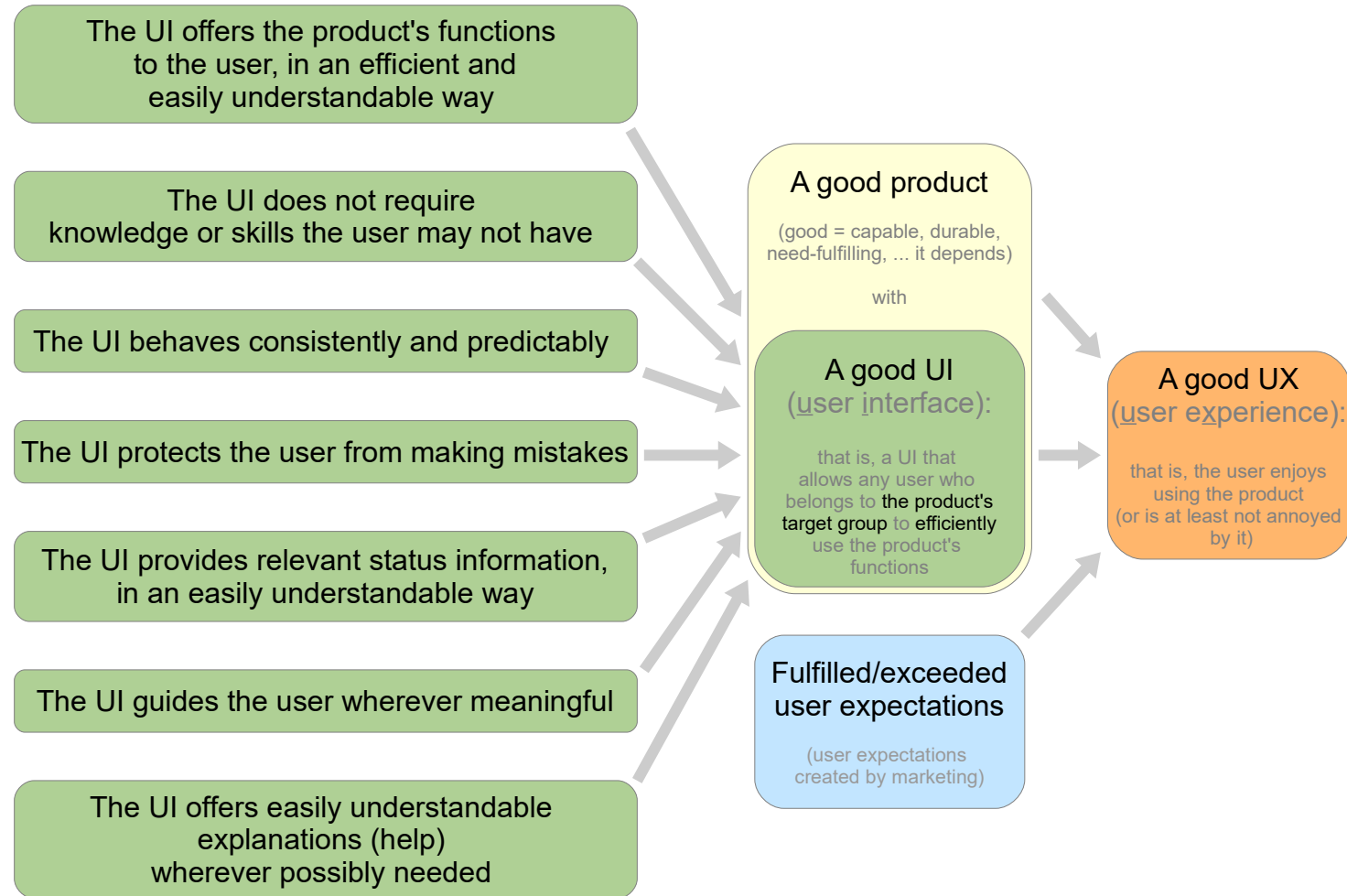
→ ... is necessary to achieve ...



So far, so good.

These 7 design goals
would make a nice
checklist ...

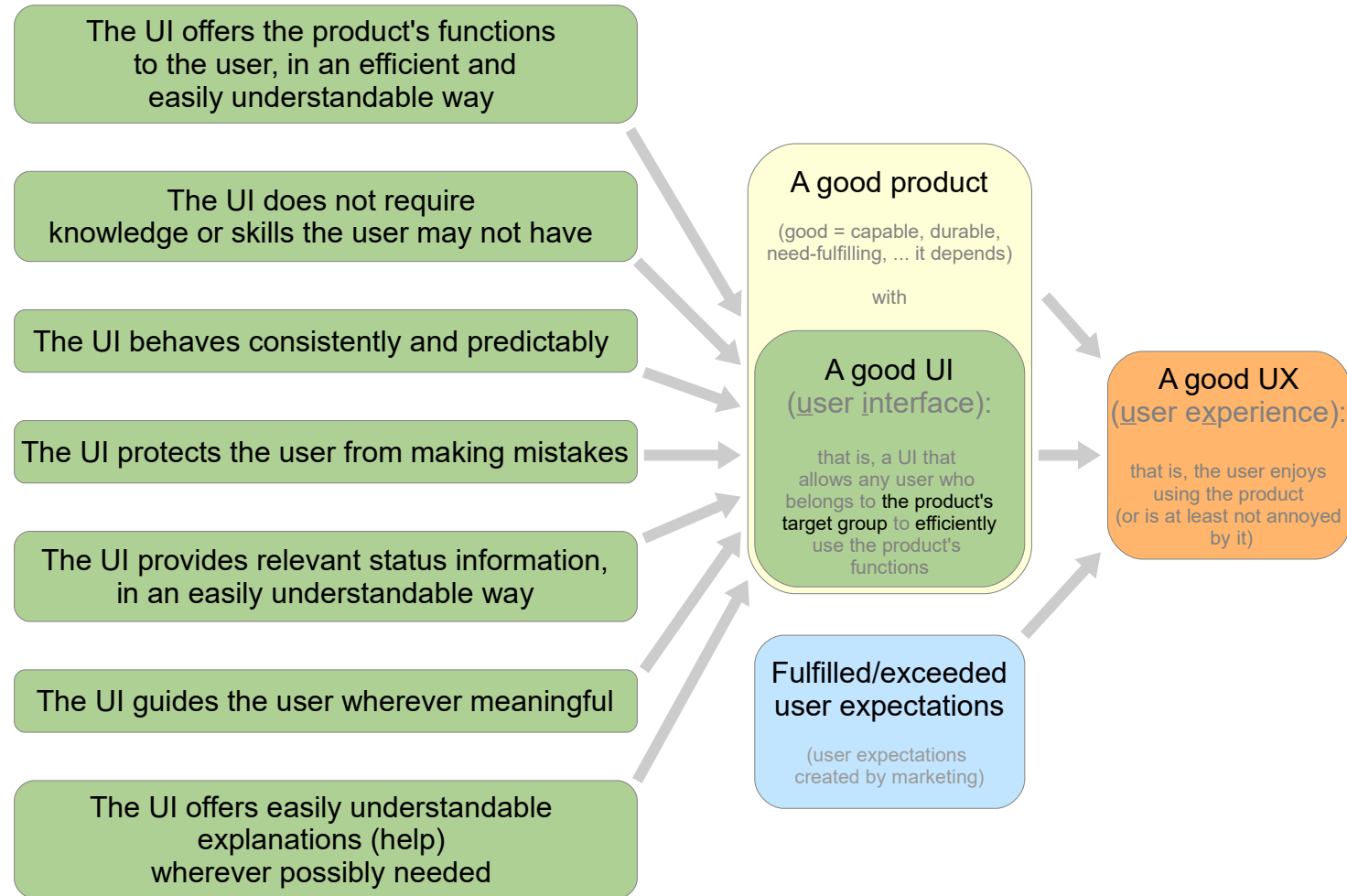
We come back to that
in a few minutes.



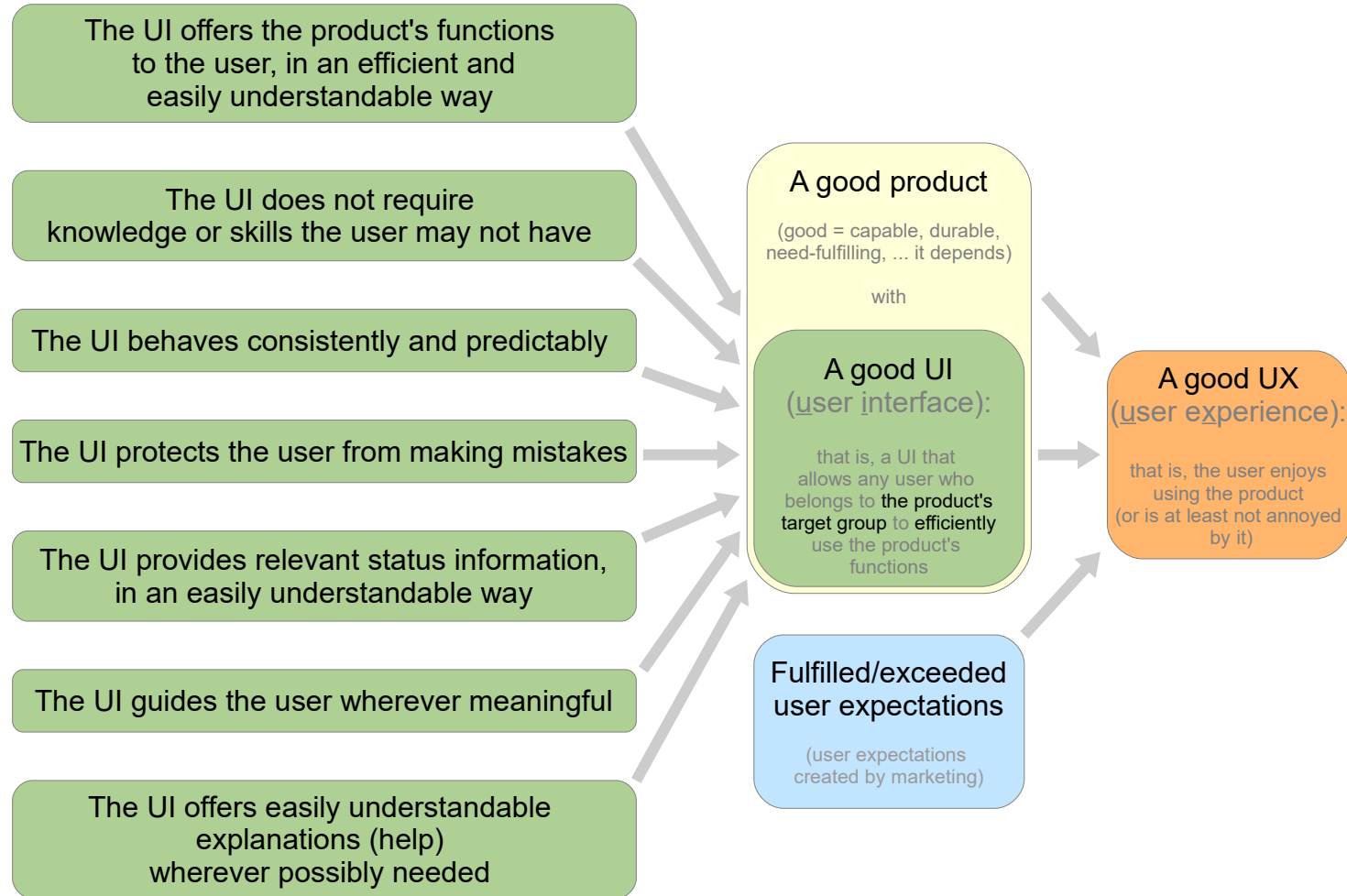
However, it would often be good to have more specific goals to work with.

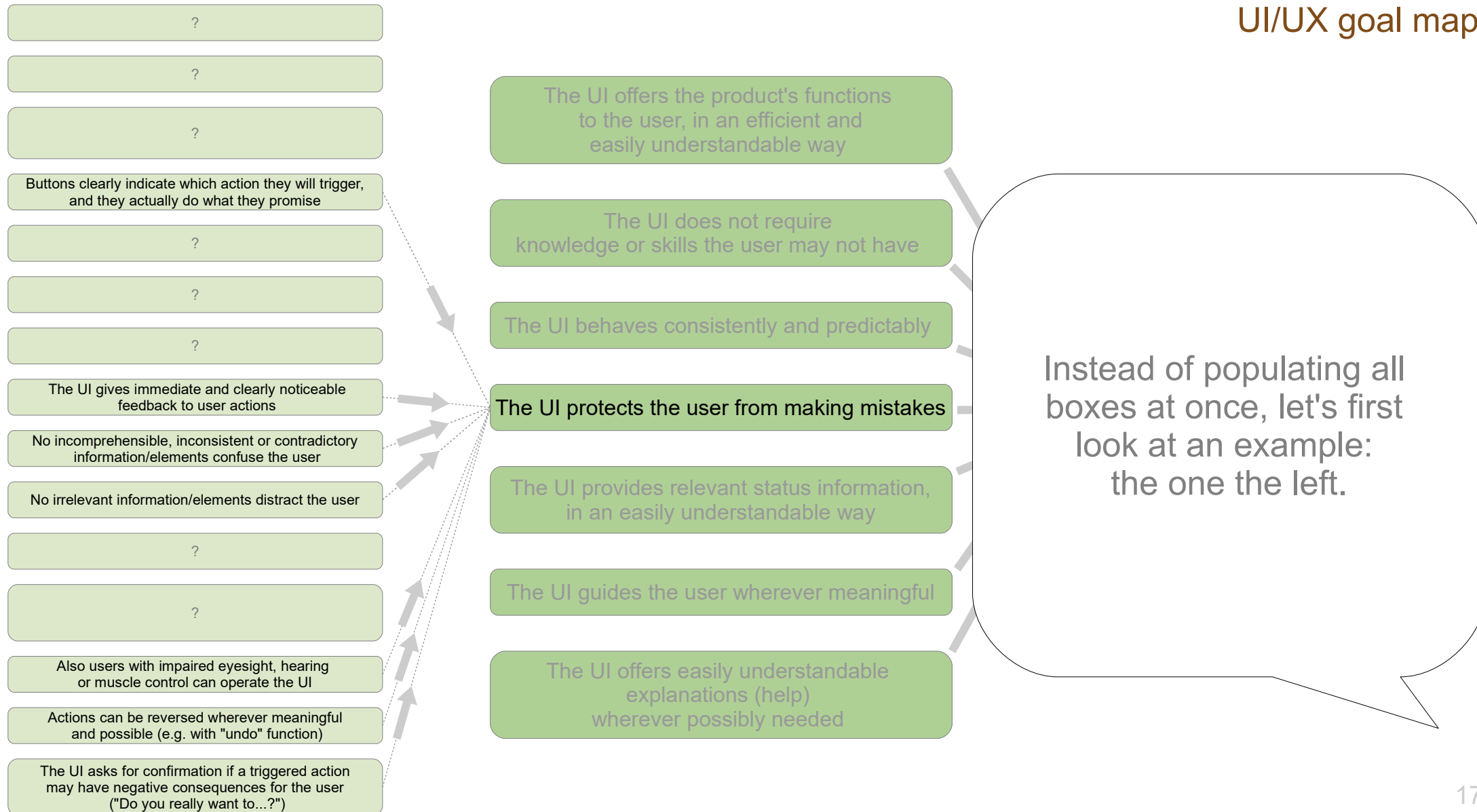
So we ask again:

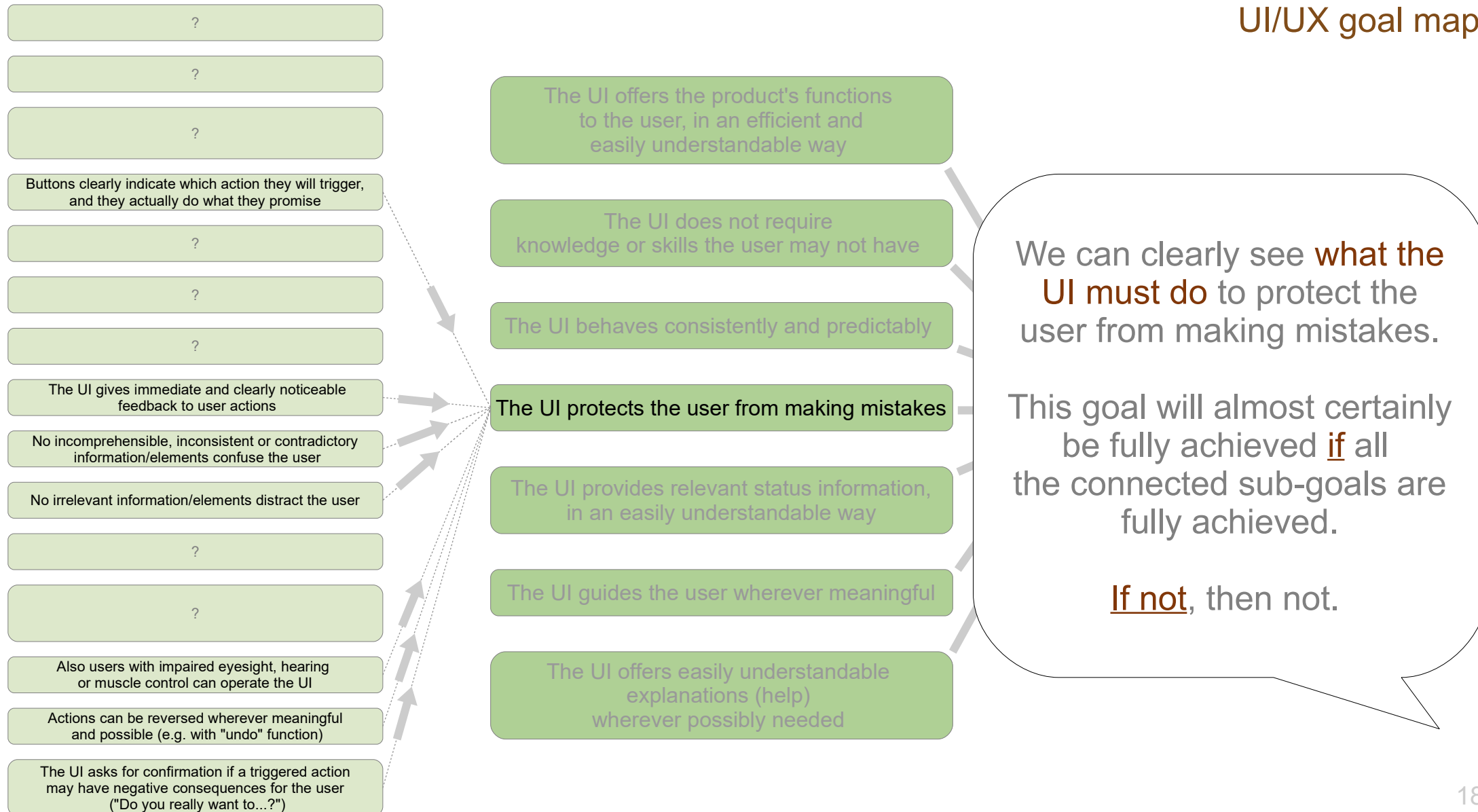
What is necessary (or helps) **to achieve** ... the just established 7 design goals?

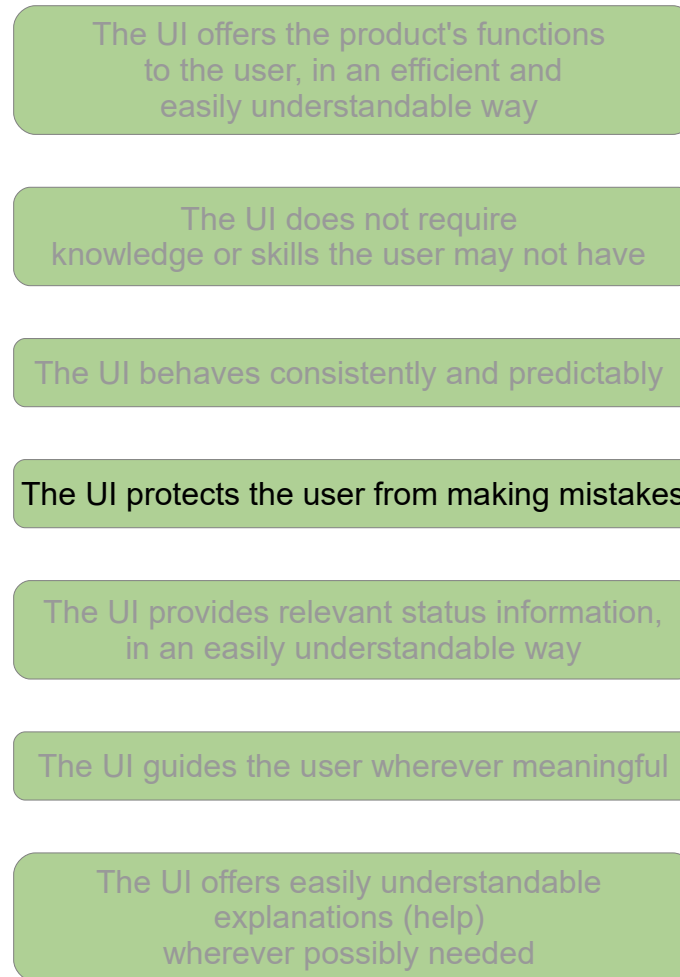
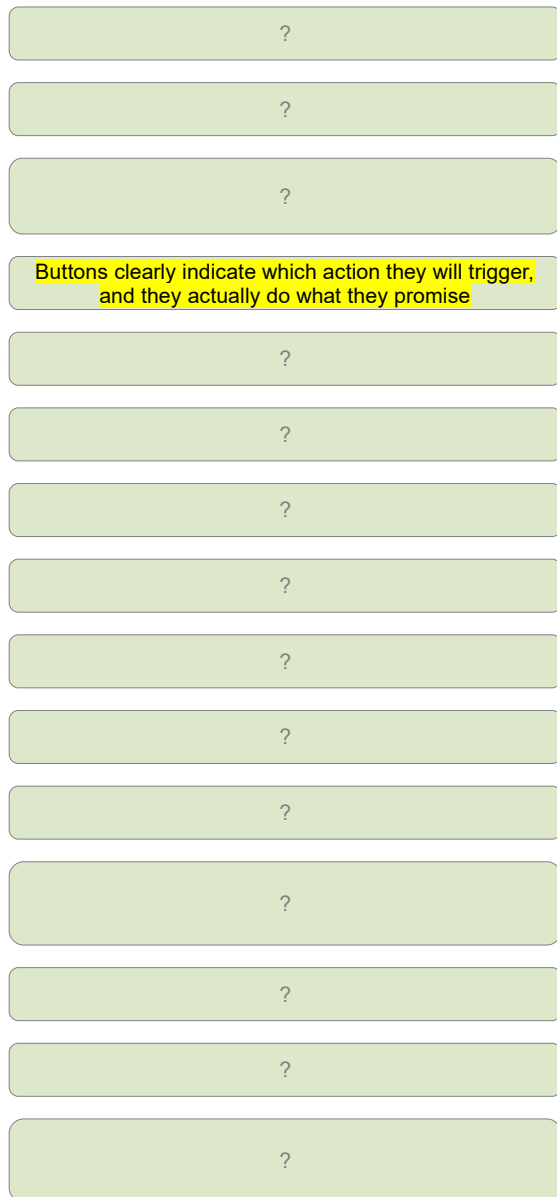


Since we're going to introduce **more specific sub-goals** we need more boxes.

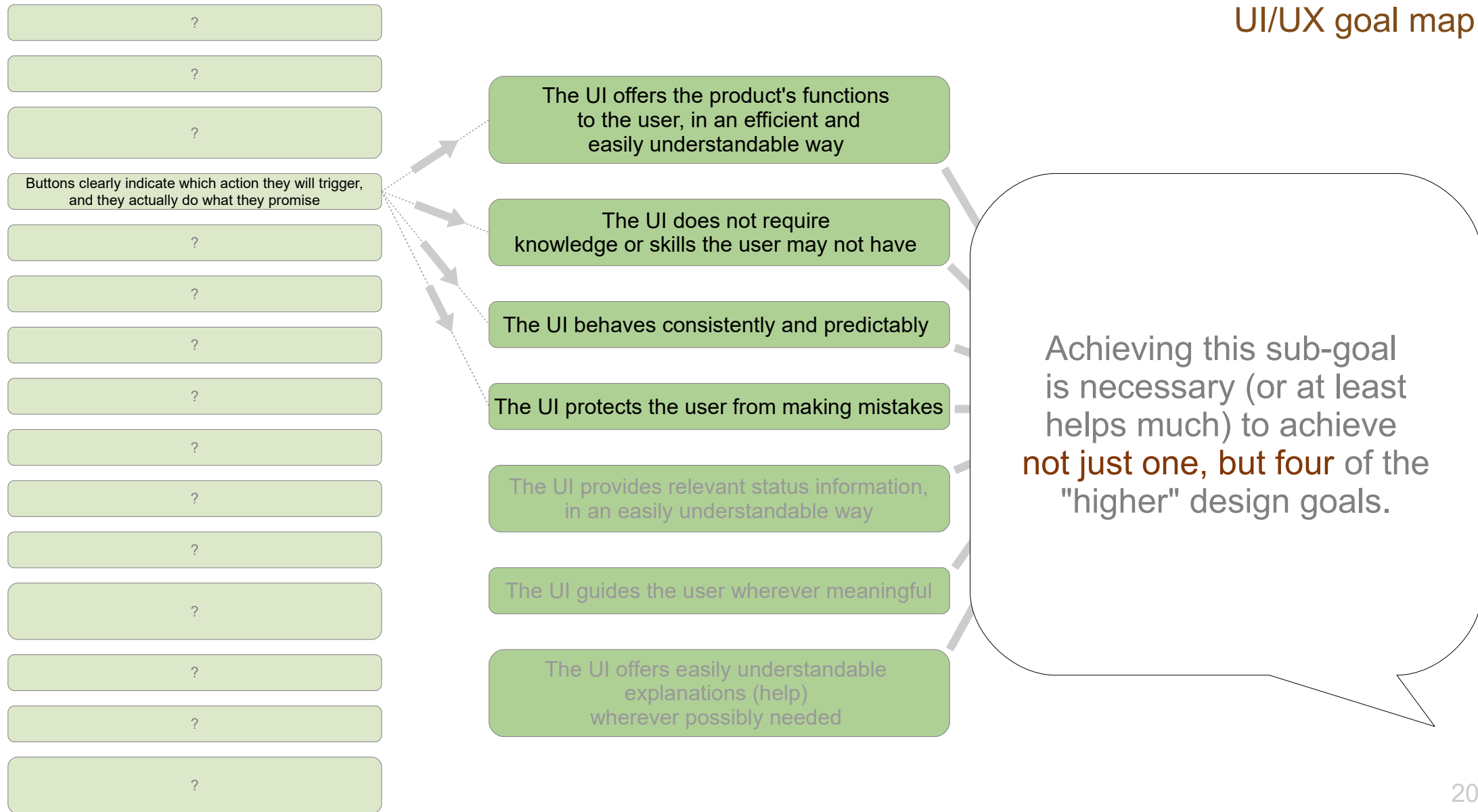


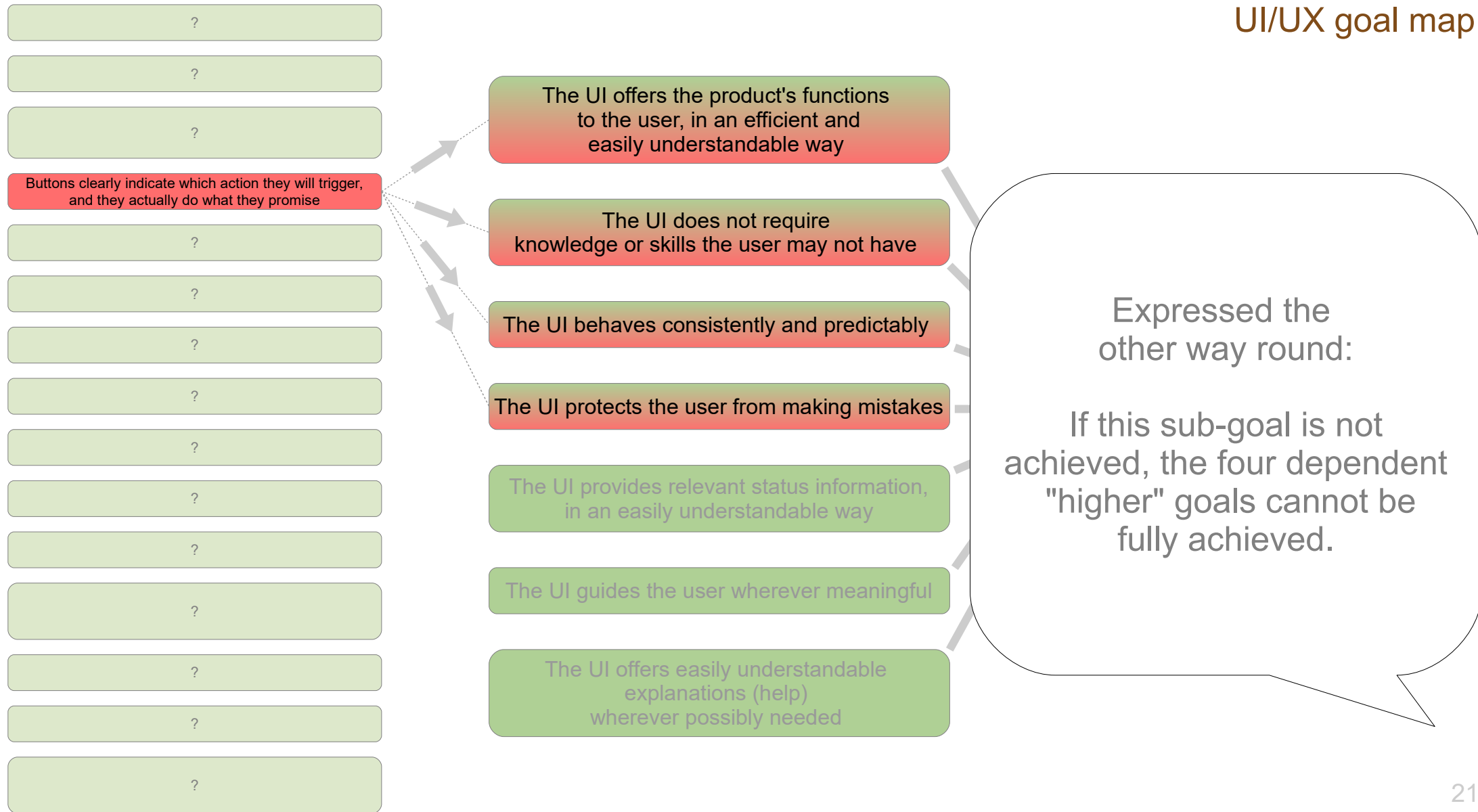






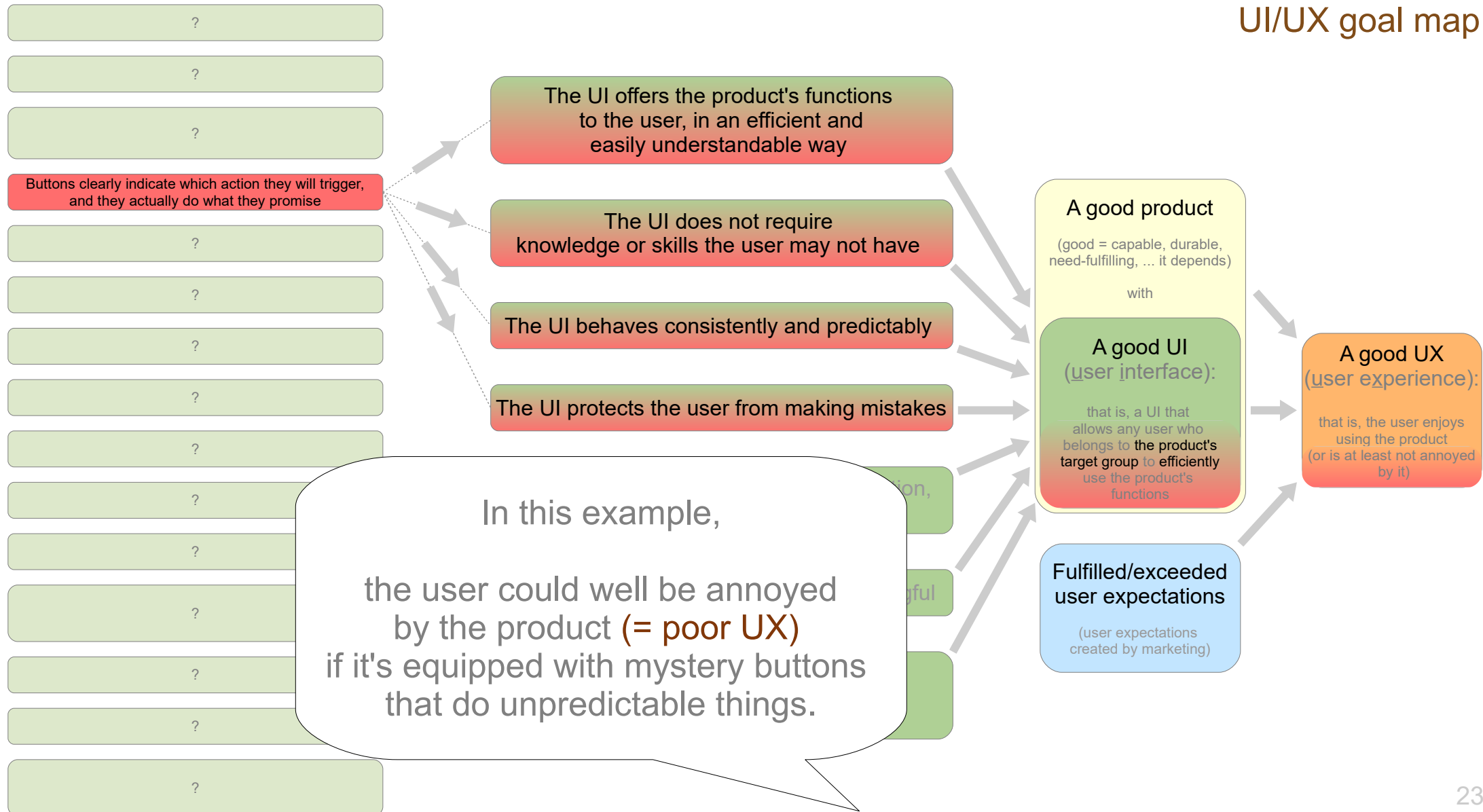
Now let's take a second look at the "Buttons clearly indicate..." sub-goal.

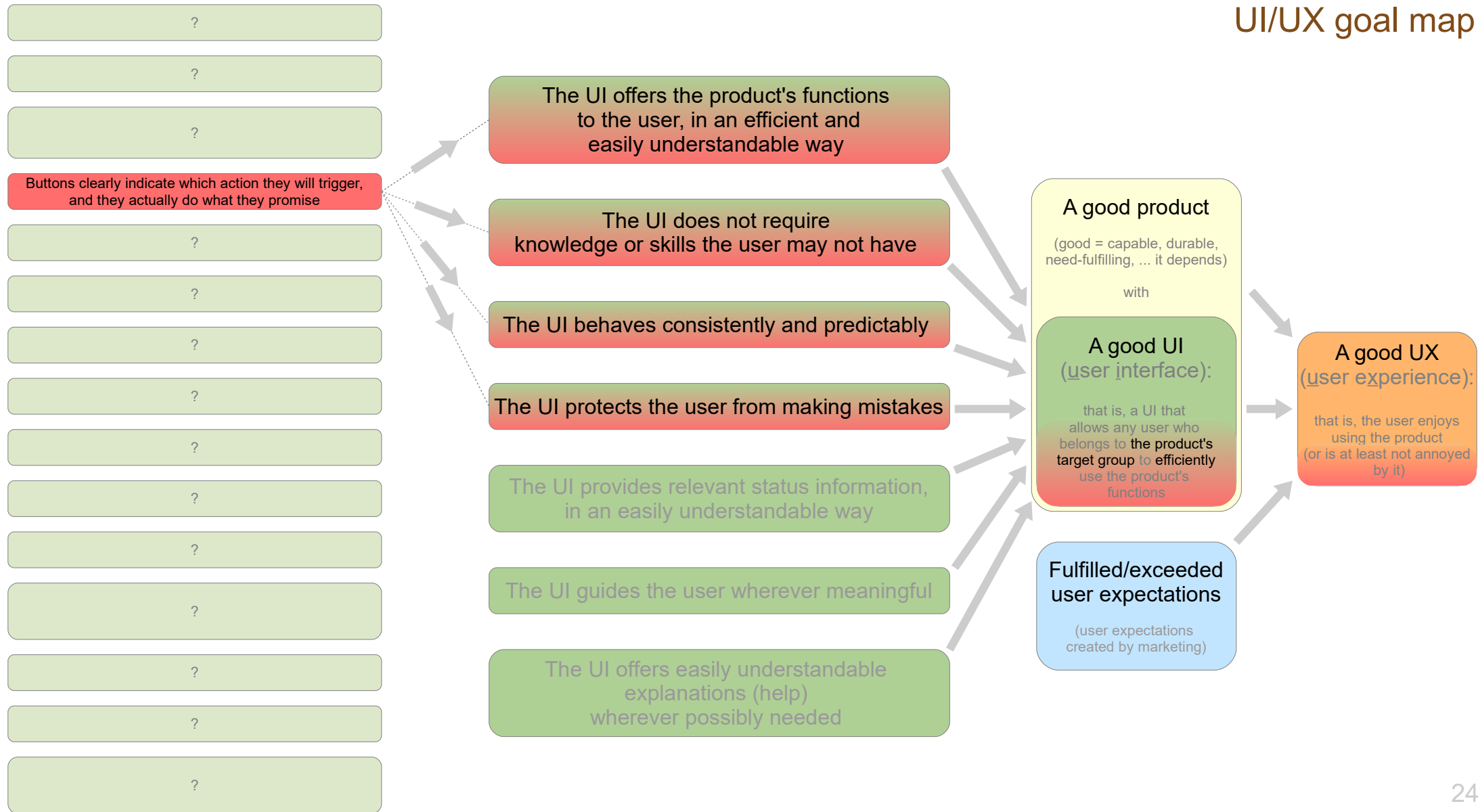




A vertical stack of 12 identical light green rectangular buttons. Each button contains a single black question mark '?' centered horizontally.







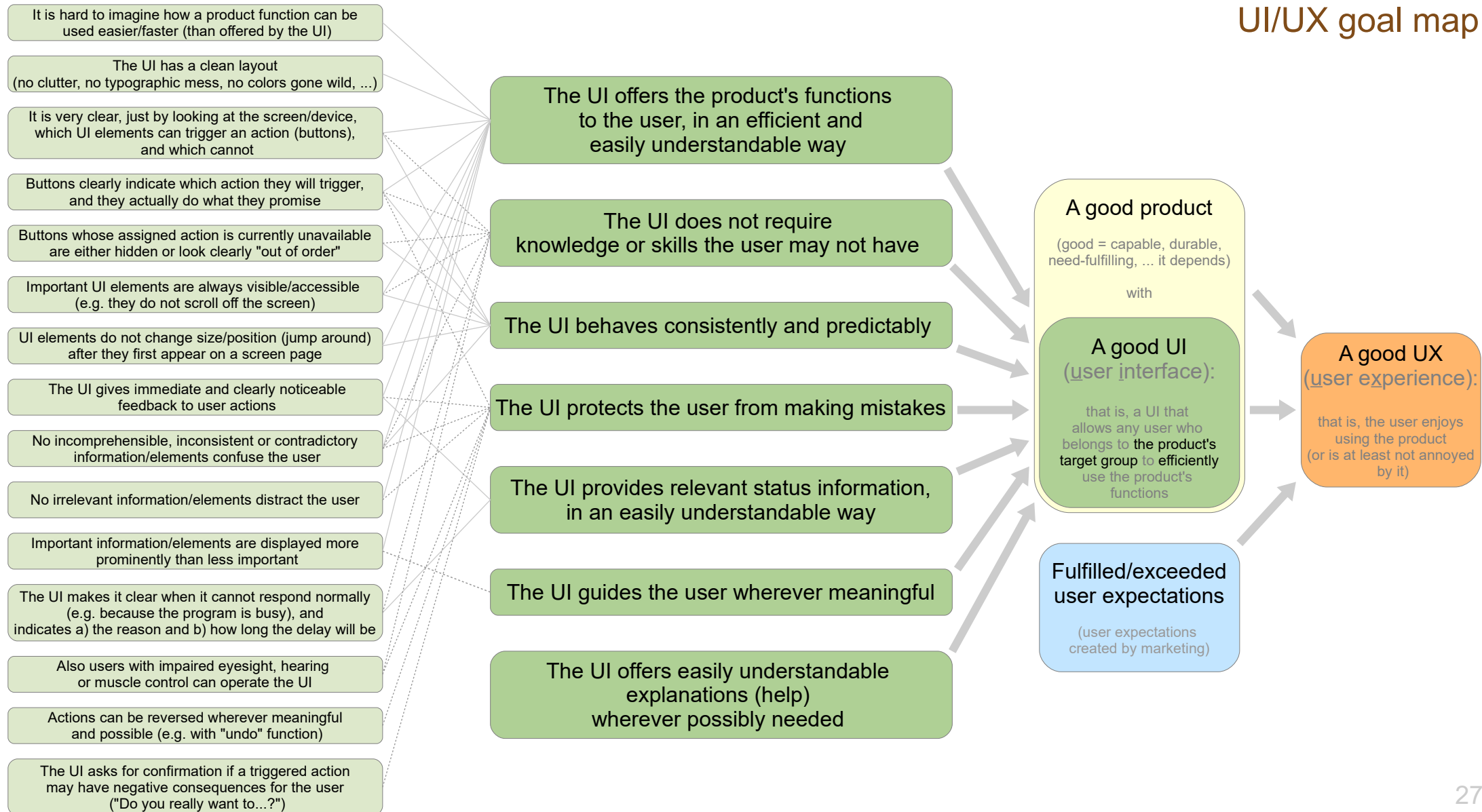




Note the lines between the goal boxes.

Just like the arrows before, they show dependencies.

The only reason to use these line types (—) instead of arrows here, is to keep the diagram readable.



Progress

Intro done

UX and UI purpose done

Necessary ingredients for a good UI done

UI checklists and evaluations up next

Closing remarks

A well-made checklist
can help **users** and **reviewers**
to easily pinpoint UI problems
-- and **developers** and
designers to avoid them.

The ultimate point of that is
of course to create better UIs.

The UI offers the product's functions to the user, in an efficient and easily understandable way
The UI does not require knowledge or skills the user may not have
The UI behaves consistently and predictably
The UI protects the user from making mistakes
The UI provides relevant status information, in an easily understandable way
The UI guides the user wherever meaningful
The UI offers easily understandable explanations (help) wherever possibly needed

Our first **UI checklist** will be built around the 7 design goals established in the previous chapter (p.14).

How true appear the statements below to a user from ...	... target group 1
The UI offers the product's functions to the user, in an efficient and easily understandable way	
The UI does not require knowledge or skills the user may not have	
The UI behaves consistently and predictably	
The UI protects the user from making mistakes	
The UI provides relevant status information, in an easily understandable way	
The UI guides the user wherever meaningful	
The UI offers easily understandable explanations (help) wherever possibly needed	

We start with adding a header row and a "target group 1" column.

How true appear the statements below to a user from ...	... target group 1	... target group 2
The UI offers the product's functions to the user, in an efficient and easily understandable way		
The UI does not require knowledge or skills the user may not have		
The UI behaves consistently and predictably		
The UI protects the user from making mistakes		
The UI provides relevant status information, in an easily understandable way		
The UI guides the user wherever meaningful		
The UI offers easily understandable explanations (help) wherever possibly needed		

However, two such columns are more practical because it usually makes sense to look at **two target groups**, for instance:

- 1: inexperienced users
- 2: experienced users

(add more groups if needed)

UI evaluation, summary		
How true appear the statements below to a user from ...	... target group 1	... target group 2
The UI offers the product's functions to the user, in an efficient and easily understandable way		
The UI does not require knowledge or skills the user may not have		
The UI behaves consistently and predictably		
The UI protects the user from making mistakes		
The UI provides relevant status information, in an easily understandable way		
The UI guides the user wherever meaningful		
The UI offers easily understandable explanations (help) wherever possibly needed		

We need a descriptive **title** ...

UI evaluation, summary		
How true appear the statements below to a user from ...	... target group 1	... target group 2
The UI offers the product's functions to the user, in an efficient and easily understandable way		
The UI does not require knowledge or skills the user may not have		
The UI behaves consistently and predictably		
The UI protects the user from making mistakes		
The UI provides relevant status information, in an easily understandable way		
The UI guides the user wherever meaningful		
The UI offers easily understandable explanations (help) wherever possibly needed		



definitely true



true



rather true



half true, half not



rather not true



not true



definitely not true

not applicable

... and an **evaluation scale** to chose the ratings from ...

UI evaluation, summary		
How true appear the statements below to a user from ...	... target group 1	... target group 2
The UI offers the product's functions to the user, in an efficient and easily understandable way	✓ rather true	✓ ✓ true
The UI does not require knowledge or skills the user may not have	✗ rather not true	✓ ✓ ✓ definitely true
The UI behaves consistently and predictably	✗ ✗ ✗ definitely not true	✗ ✗ not true
The UI protects the user from making mistakes	not applicable	not applicable
The UI provides relevant status information, in an easily understandable way	○ half true, half not	✓ rather true
The UI guides the user wherever meaningful	✗ rather not true	○ half true, half not
The UI offers easily understandable explanations (help) wherever possibly needed	✗ ✗ not true	✗ rather not true

... like this, for example.

UI evaluation, summary		
How true appear the statements below to a user from ...	... target group 1	... target group 2
The UI offers the product's functions to the user, in an efficient and easily understandable way	✓ rather true	✓ ✓ true
The UI does not require knowledge or skills the user may not have	✗ rather not true	✓ ✓ ✓ definitely true
The UI behaves consistently and predictably	✗ ✗ ✗ definitely not true	✗ ✗ not true
The UI protects the user from making mistakes	not applicable	not applicable
The UI provides relevant status information, in an easily understandable way	○ half true, half not	✓ rather true
The UI guides the user wherever meaningful	✗ rather not true	○ half true, half not
The UI offers easily understandable explanations (help) wherever possibly needed	✗ ✗ not true	✗ rather not true

Numbers assigned to the rating choices allow score calculations later on.

✓ ✓ ✓ definitely true	+ 3
✓ ✓ true	+ 2
✓ rather true	+ 1
○ half true, half not	0
✗ rather not true	- 1
✗ ✗ not true	- 2
✗ ✗ ✗ definitely not true	- 3

UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way	✓ rather true	✓ ✓ true	1 a
The UI does not require knowledge or skills the user may not have	✗ rather not true	✓ ✓ ✓ definitely true	2 a
The UI behaves consistently and predictably	✗ ✗ ✗ definitely not true	✗ ✗ not true	3 a
The UI protects the user from making mistakes	not applicable	not applicable	4 a
The UI provides relevant status information, in an easily understandable way	○ half true, half not	✓ rather true	5 a
The UI guides the user wherever meaningful	✗ rather not true	○ half true, half not	6 a
The UI offers easily understandable explanations (help) wherever possibly needed	✗ ✗ not true	✗ rather not true	7 a

Adding **IDs** to the evaluation aspects/statements makes it easier to refer to them,

e.g. "3a needs improvement".

(We will encounter "3b" later.)

UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way	✓ rather true	✓ ✓ true	1 a
The UI does not require knowledge or skills the user may not have	✗ rather not true	✓ ✓ ✓ definitely true	2 a
The UI behaves consistently and predictably	✗ ✗ ✗ definitely not true	✗ ✗ not true	3 a
The UI protects the user from making mistakes	not applicable	not applicable	4 a
The UI provides relevant status information, in an easily understandable way	○ half true, half not	✓ rather true	5 a
The UI guides the user wherever meaningful	✗ rather not true	○ half true, half not	6 a
The UI offers easily understandable explanations (help) wherever possibly needed	✗ ✗ not true	✗ rather not true	7 a

So that's our first checklist.

We will make a second one in a moment, but there's something else we need more:

context.

UI evaluation, scenario
Product: Weather app "X" running on platform "Y", version 1.2.3 (latest available on 29-Feb-2023) Evaluation scope: Using the already installed app to 1) check the forecast for Cape Town 2 days ahead, and 2) check the average rainfall in Mumbai in August Target group 1: Inexperienced users who use this app seldom (once every 3 months) Target group 2: Experienced users who use this app often (3 times a week) The evaluation was completed on 29-Feb-2023 by Alice Evalio. Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way	✓ rather true	✓ ✓ true	1 a
The UI does not require knowledge or skills the user may not have	✗ rather not true	✓ ✓ ✓ definitely true	2 a
The UI behaves consistently and predictably	✗ ✗ ✗ definitely not true	✗ ✗ not true	3 a
The UI protects the user from making mistakes	not applicable	not applicable	4 a
The UI provides relevant status information, in an easily understandable way	○ half true, half not	✓ rather true	5 a
The UI guides the user wherever meaningful	✗ rather not true	○ half true, half not	6 a
The UI offers easily understandable explanations (help) wherever possibly needed	✗ ✗ not true	✗ rather not true	7 a

We must provide information about the **evaluation scenario**,

otherwise the evaluation won't make sense to anyone else.

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a
The UI guides the user wherever meaningful			6 a
The UI offers easily understandable explanations (help) wherever possibly needed			7 a

What you now see on the left is a **template for UI evaluations** that covers all the essentials.

Of all **templates (evaluation setups)** this document will suggest, this one is the easiest to make.

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a
The UI guides the user wherever meaningful			6 a
The UI offers easily understandable explanations (help) wherever possibly needed			7 a

Template # 1

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a
The UI guides the user wherever meaningful			6 a
The UI offers easily understandable explanations (help) wherever possibly needed			7 a



UI evaluation, simple scores		
Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score		

Adding a section
for **simple numerical scores**
to the setup is not much work
and often useful.

The scores are calculated
from the summary ratings
so that they fit in a
0-100 % range.

UI evaluation, scenario
Product: Weather app "X" running on platform "Y", version 1.2.3 (latest available on 29-Feb-2023) Evaluation scope: Using the already installed app to 1) check the forecast for Cape Town 2 days ahead, and 2) check the average rainfall in Mumbai in August Target group 1: Inexperienced users who use this app seldom (once every 3 months) Target group 2: Experienced users who use this app often (3 times a week) The evaluation was completed on 29-Feb-2023 by Alice Evalio. Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way	✓ rather true	✓ ✓ true	1 a
The UI does not require knowledge or skills the user may not have	✗ rather not true	✓ ✓ ✓ definitely true	2 a
The UI behaves consistently and predictably	✗ ✗ ✗ definitely not true	✗ ✗ not true	3 a
The UI protects the user from making mistakes	not applicable	not applicable	4 a
The UI provides relevant status information, in an easily understandable way	○ half true, half not	✓ rather true	5 a
The UI guides the user wherever meaningful	✗ rather not true	○ half true, half not	6 a
The UI offers easily understandable explanations (help) wherever possibly needed	✗ ✗ not true	✗ rather not true	7 a



UI evaluation, simple scores		
Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score	33 %	58 %

The previous example would then look like this.

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a
The UI guides the user wherever meaningful			6 a
The UI offers easily understandable explanations (help) wherever possibly needed			7 a



UI evaluation, simple scores		
Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score		

Template # 2

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, summary			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a
The UI guides the user wherever meaningful			6 a
The UI offers easily understandable explanations (help) wherever possibly needed			7 a



UI evaluation, simple scores		
Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score		
100 % : best possible score		

Not bad. But what about that second checklist?

Well, sometimes a UI evaluation needs to be more detailed. For such cases a **more detailed checklist** is needed.

UI evaluation, scenario

Product: *(description)*

Evaluation scope: *(description)*

Target group 1: *(description)*

Target group 2: *(description)*

The evaluation was completed on *(date)* by *(name)*.

Evaluation scale range:

7 choices + "not applicable":

"definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)

UI evaluation, medium detail level			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

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UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, medium detail level			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

And where does all this come from?

Good question. The first 15 list items are **UI design** "sub goals" established in the previous chapter (p. 25).

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, medium detail level			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

The last 3 items
you've already seen in the
"summary" checklist.

They exist in both checklists
because they work on both
detail levels, and because both
checklists need them to cover
all UI aspects.

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, medium detail level			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

A layout note:

To make better use of this document's landscape page format, I arranged scenario and checklist **side by side**.

Otherwise an **over/under** pattern, as in the previous templates, is preferable.

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, medium detail level			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

Alright. Now let's wrap this up.

UI evaluation, scenario

Product: (description)

Evaluation scope: (description)

Target group 1: (description)
Target group 2: (description)

The evaluation was completed on (date) by (name).

Evaluation scale range:
7 choices + "not applicable":
"definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



UI evaluation, medium detail level			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

What you currently see is the third **evaluation template/setup** suggested in this document.

UI evaluation, scenario
Product: <i>(description)</i>
Evaluation scope: <i>(description)</i>
Target group 1: <i>(description)</i>
Target group 2: <i>(description)</i>
The evaluation was completed on <i>(date)</i> by <i>(name)</i> .
Evaluation scale range: 7 choices + "not applicable": "definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



Template # 3

UI evaluation, medium detail level			
How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

1 UI evaluation, scenario

Product: *(description)*

Evaluation scope: *(description)*

Target group 1: *(description)*

Target group 2: *(description)*

The evaluation was completed on *(date)* by *(name)*.

Evaluation scale range:

7 choices + "not applicable":

"definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)

This is the fourth one.

3 UI evaluation, simple scores

Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score		

2 UI evaluation, medium detail level

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

1 UI evaluation, scenario

Product: *(description)*

Evaluation scope: *(description)*

Target group 1: *(description)*

Target group 2: *(description)*

The evaluation was completed on *(date)* by *(name)*.

Evaluation scale range:

7 choices + "not applicable":

"definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)



2 UI evaluation, medium detail level

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

Template # 4

3 UI evaluation, simple scores

Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score		



1 UI evaluation, scenario

Product: *(description)*

Evaluation scope: *(description)*

Target group 1: *(description)*

Target group 2: *(description)*

The evaluation was completed on *(date)* by *(name)*.

Evaluation scale range:

7 choices + "not applicable":

"definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)

3 UI evaluation, summary (of medium detail level results)

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a (16 b)
The UI guides the user wherever meaningful			6 a (17 b)
The UI offers easily understandable explanations (help) wherever possibly needed			7 a (18 b)

4 UI evaluation, simple scores

Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score		

2 UI evaluation, medium detail level

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after the			7 b
The			8 b
No in			9 b
No irr			10 b
Import			11 b
The UI			12 b
indicates			13 b
Also use or muscle control can operate the UI			14 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			15 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			16 b (5 a)
The UI provides relevant status information, in an easily understandable way			17 b (6 a)
The UI guides the user wherever meaningful			18 b (7 a)
The UI offers easily understandable explanations (help) wherever possibly needed			19 b

And this is the last one.

1 UI evaluation, scenario

Product: *(description)*

Evaluation scope: *(description)*

Target group 1: *(description)*

Target group 2: *(description)*

The evaluation was completed on *(date)* by *(name)*.

Evaluation scale range:

7 choices + "not applicable":

"definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)

3 UI evaluation, summary (of medium detail level results)

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a (16 b)
The UI guides the user wherever meaningful			6 a (17 b)
The UI offers easily understandable explanations (help) wherever possibly needed			7 a (18 b)

4 UI evaluation, simple scores

Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score		

2 UI evaluation, medium detail level

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild ...)			2 b
It is very clear, ... UI elements can be found			3 b
Buttons are ...			4 b
Buttons are ...			5 b
Important ...			6 b
UI elements ...			7 b
The ...			8 b
No inc ...			9 b
No irre ...			10 b
Import ...			11 b
The UI r ... (... indicates			12 b
Als ...			13 b
Activ ... a ...			14 b
The UI asks for ... negative consequences			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

Note that the "summary" results can -- and should -- be derived from the "medium detail level" results.

You can do this manually, with a spreadsheet, or with other software.

The diagram on p. 26 shows all the dependencies.

1 UI evaluation, scenario

Product: *(description)*

Evaluation scope: *(description)*

Target group 1: *(description)*

Target group 2: *(description)*

The evaluation was completed on *(date)* by *(name)*.

Evaluation scale range:

7 choices + "not applicable":

"definitely not true" (-3), "not true" (-2), "rather not true" (-1), "half true, half not" (0), "rather true" (+1), "true" (+2), "definitely true" (+3), "not applicable" (n/a)

3 UI evaluation, summary (of medium detail level results)

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
The UI offers the product's functions to the user, in an efficient and easily understandable way			1 a
The UI does not require knowledge or skills the user may not have			2 a
The UI behaves consistently and predictably			3 a
The UI protects the user from making mistakes			4 a
The UI provides relevant status information, in an easily understandable way			5 a (16 b)
The UI guides the user wherever meaningful			6 a (17 b)
The UI offers easily understandable explanations (help) wherever possibly needed			7 a (18 b)

4 UI evaluation, simple scores

Merged unweighted scores (calculated from summary table)	Result for target group 1	Result for target group 2
0 % : worst possible score 100 % : best possible score		

2 UI evaluation, medium detail level

How true appear the statements below to a user from ...	... target group 1	... target group 2	Statement ID
It is hard to imagine how a product function can be used easier/faster (than offered by the UI)			1 b
The UI has a clean layout (no clutter, no typographic mess, no colors gone wild, ...)			2 b
It is very clear, just by looking at the screen/device, which UI elements can trigger an action (buttons), and which cannot			3 b
Buttons clearly indicate which action they will trigger, and they actually do what they promise			4 b
Buttons whose assigned action is currently unavailable are either hidden or look clearly "out of order"			5 b
Important UI elements are always visible/accessible (e.g. they do not scroll off the screen)			6 b
UI elements do not change size/position (jump around) after they first appear on a screen page			7 b
The UI gives immediate and clearly noticeable feedback to user actions			8 b
No incomprehensible, inconsistent or contradictory information/elements confuse the user			9 b
No irrelevant information/elements distract the user			10 b
Important information/elements are displayed more prominently than less important			11 b
The UI makes it clear when it cannot respond normally (e.g. because the program is busy), and indicates a) the reason and b) how long the delay will be			12 b
Also users with impaired eyesight, hearing or muscle control can operate the UI			13 b
Actions can be reversed wherever meaningful and possible (e.g. with "undo" function)			14 b
The UI asks for confirmation if a triggered action may have negative consequences for the user ("Do you really want to...?")			15 b
The UI provides relevant status information, in an easily understandable way			16 b (5 a)
The UI guides the user wherever meaningful			17 b (6 a)
The UI offers easily understandable explanations (help) wherever possibly needed			18 b (7 a)

Template
5

Progress

Intro	done
UX and UI purpose	done
Necessary ingredients for a good UI	done
UI checklists and evaluations	done
Closing remarks	up next

1.

The evaluation setups/templates

2 (p. 44) and
4 (p. 54)

are "best value for effort", I think.

2.

I plan to make a **video** based on this document (probably in 2021).

The video will have the same title as the document, and it will be available on a very well-known video platform.

As a follow-up, I would then like to add a few videos showing **real-life UI evaluation examples**.

3.

How well a UI works for a specific target group is generally best evaluated by **unbiased reviewers** who observe **members of that group** using the product.

Such evaluations cannot be done correctly by the UI creators.

That's because seeing the world through someone else's eyes is very difficult, and ignoring own knowledge is almost impossible.

4.

What absolutely puzzles me is that many companies (even very large and resourceful ones) deliver their products with **UIs that don't work well for casual or new users** (customers).

This obviously hurts their own businesses. Why do they do that?

Too much to remember, or TLDR?

All pages in this document are there for a reason ... but 13, 43/44, 54 and 21/22 make a fair **takeaway** selection.

Thanks for your interest,

Edgar Hartel (uis@hartel.no)